

1870

835

A.D. 1870. MAR. 21. N^o 835.
ASCOUGH'S COMPLETE SPECIFICATION.

FIG. 7.

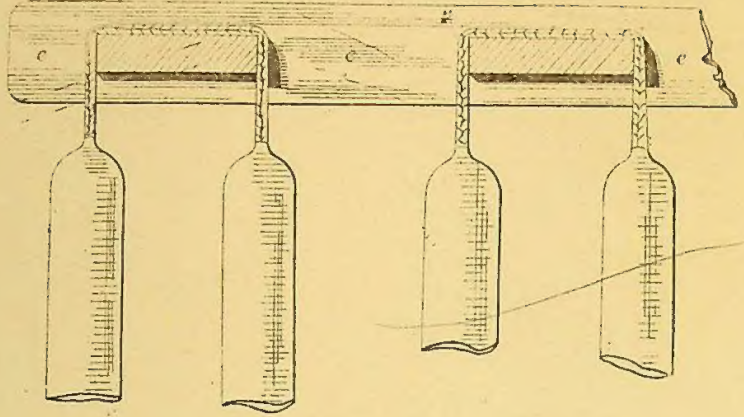


FIG. 1.

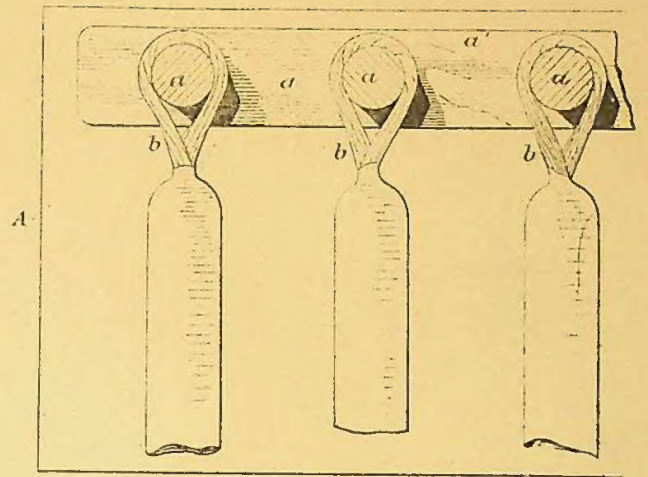


FIG. 6.



FIG. 9.



FIG. 10.



FIG. 8.

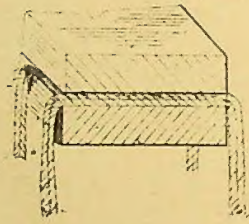
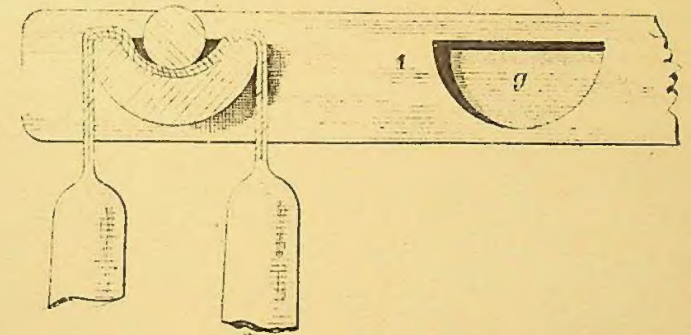


FIG. 21.



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FIG. 2.

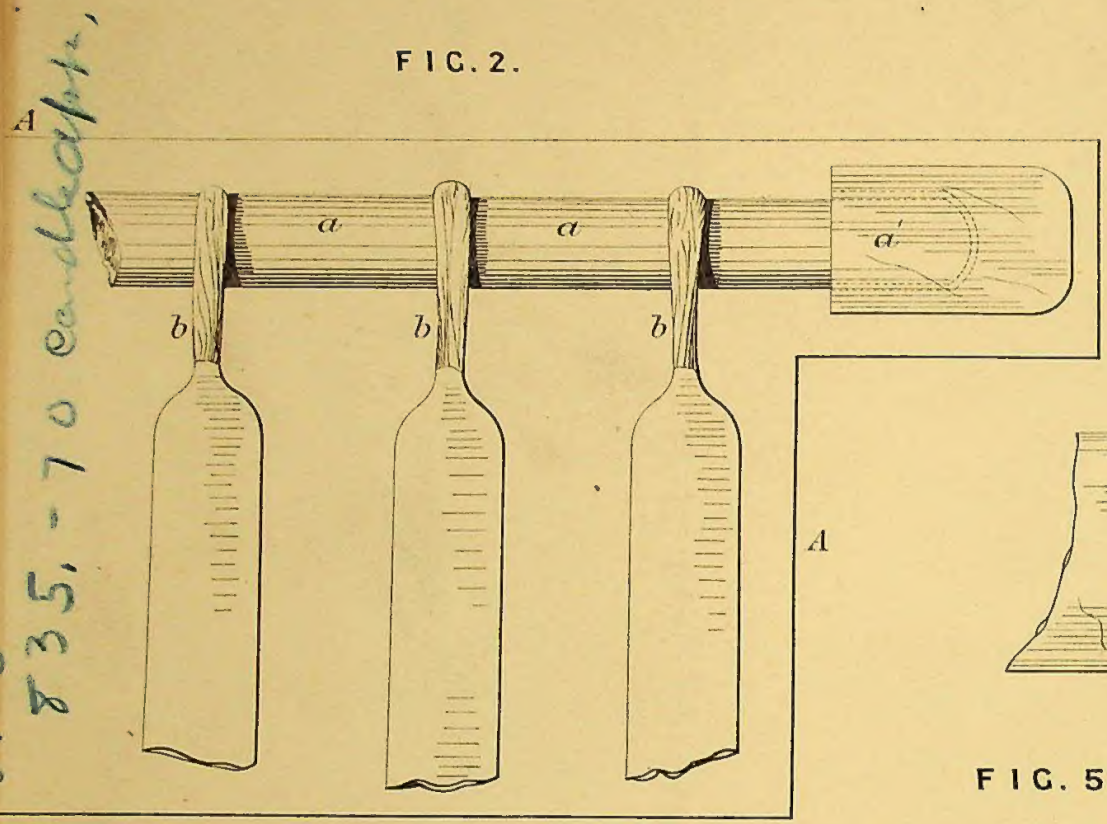


FIG. 3.

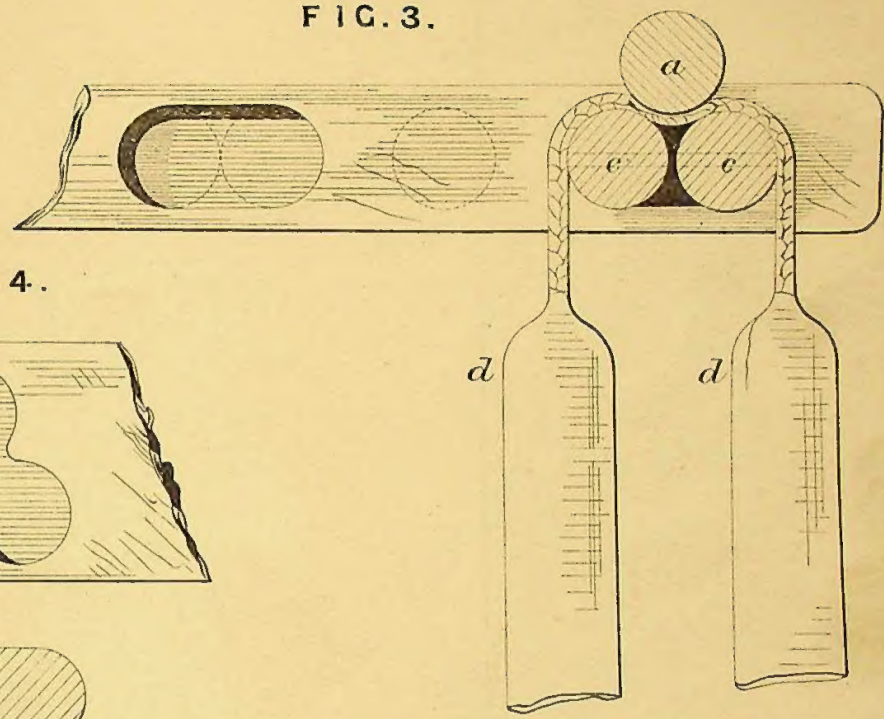


FIG. 4.

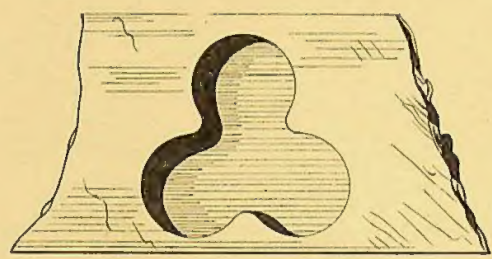


FIG. 5.



FIG. 22.

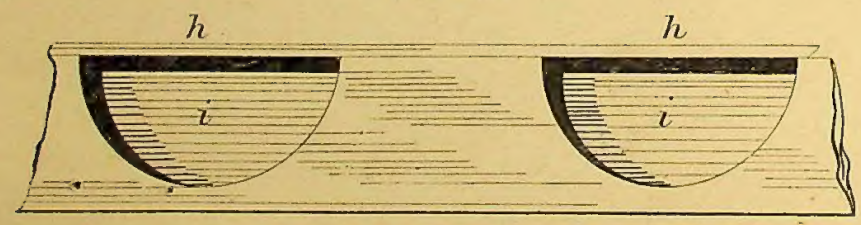
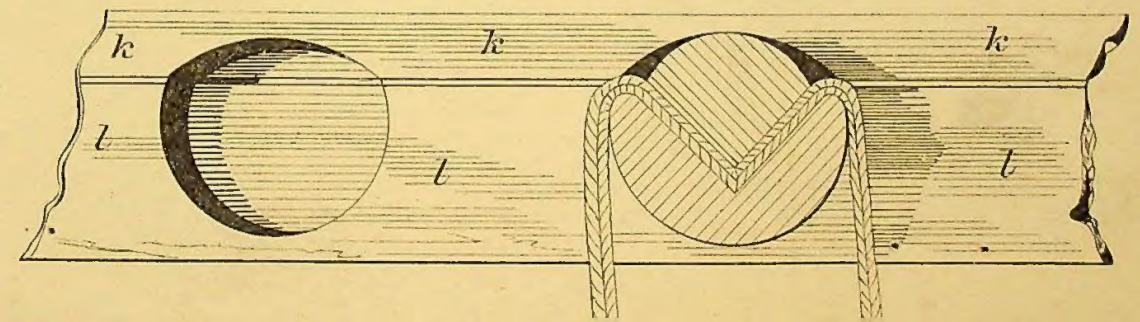


FIG. 23.



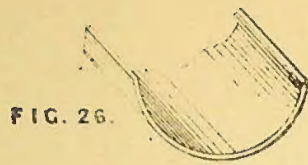


FIG. 26.

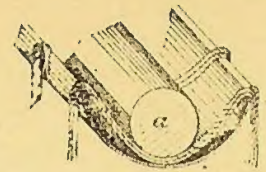


FIG. 27.



FIG. 24.



FIG. 25.

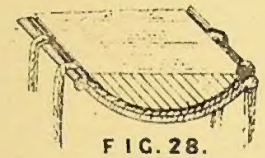


FIG. 28.

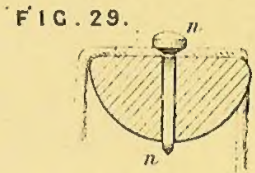


FIG. 29.

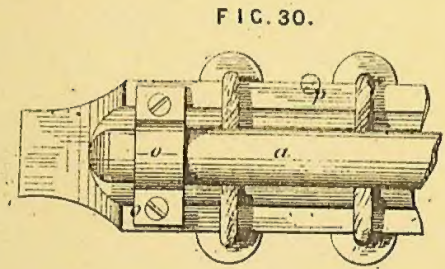


FIG. 30.

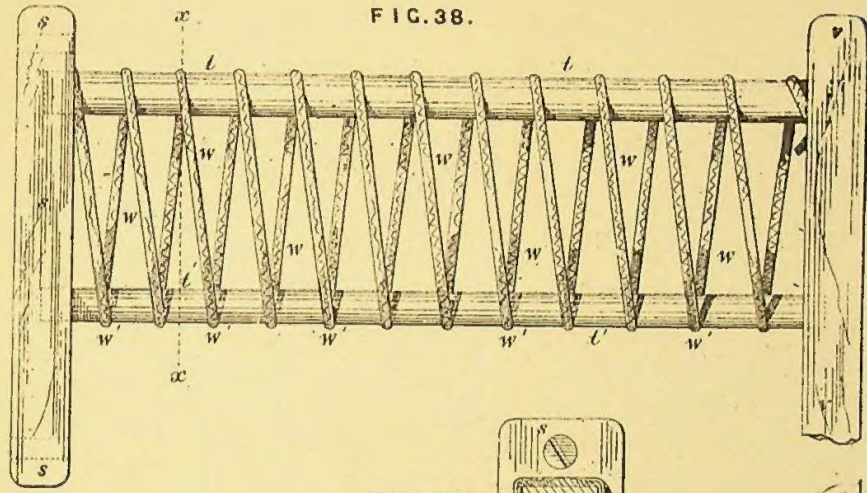


FIG. 38.

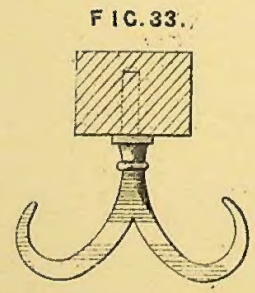


FIG. 33.

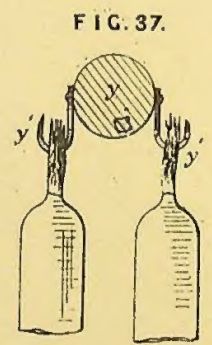


FIG. 37.

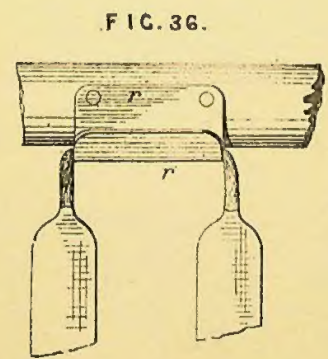


FIG. 36.

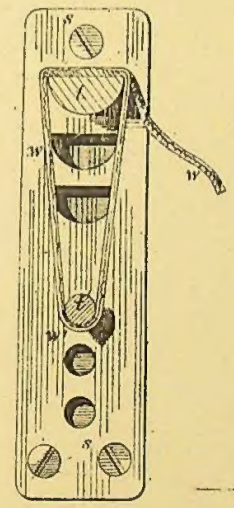
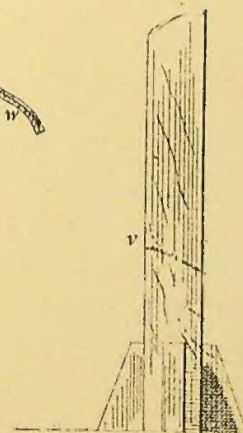
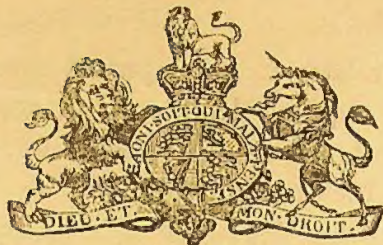


FIG. 39.



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1870-85 87. OILS, FATS & GLUE,
Candles & Apparatus



A.D. 1870, 21st MARCH. N° 835.

Candles.

LETTERS PATENT to Jesse Ascough, of Handsworth, in the County of Stafford, Agent, for the Invention of "**IMPROVEMENTS IN THE MANUFACTURE OF CANDLES, AND IN APPARATUS TO BE EMPLOYED THEREIN.**"

Sealed the 31st May 1870, and dated the 21st March 1870.

COMPLETE SPECIFICATION filed by the said Jesse Ascough at the Office of the Commissioners of Patents, with his Petition and Declaration, on the 21st March 1870, pursuant to the 9th Section of the Patent Law Amendment Act, 1852.

5 **TO ALL TO WHOM THESE PRESENTS SHALL COME, I, JESSE ASCOUGH**, of Handsworth, in the County of Stafford, Agent, do hereby declare the nature of the said Invention for "**IMPROVEMENTS IN THE MANUFACTURE OF CANDLES, AND IN APPARATUS TO BE EMPLOYED THEREIN,**" and in what manner the same is to be performed, to be particularly described
10 and ascertained in and by the following statement thereof, that is to say:—

My Invention refers more particularly to the manufacture of snuffless and other "dip" candles, in pairs or singly, and to improved methods of forming and arranging the rods and blocks employed to carry the

Ascough's Improvements in the Manufacture of Candles.

wicks during the process of dipping such wicks into the melted tallow or other fatty composition.

My Invention also relates to an improved method of winding the wick material for the required lengths, with apparatus therefor, the lengths of wick being afterwards cut either before the dipping process 5 or after the wicks have been partially dipped.

I purpose using any suitable kind of wick or wicks whether platted, gimped, round, sewn through, twisted, or otherwise, but by preference I use a platted wick; in some cases I add to such wicks either a white or colored thread, or threads of worsted or other fibrous animal product, 10 which may be incorporated with the manufactured wick or added thereto, as required, and this part of my Invention is equally applicable to the wicks of other descriptions of candles than dips. The effect of the addition of this material to the wick is increased brilliancy of the light with more perfect combustion of the wick. 15

The object and nature of my improvements will be more readily understood by aid of the accompanying Drawings, reference being had to the letters and figures marked thereon.

For the sake of clearness I will first describe the ordinary and well known arrangement of rods and blocks used for carrying the wicks and 20 represented in Figures 1 and 2 contained within the line A.

Figure 1 is a cross section, and Figure 2 a part side elevation of a series of wooden rods (*a*), which are held by, and fit into, a block at each end, one of such blocks (*a'*) being shewn. The rods (*a*) carry the wicks (*b*) during the process of dipping or formation of the candles in 25 single rows, and which are partly represented in the Drawings as finished and ready for removal from the rods.

Figures 1 and 2 are merely shewn for the purpose of illustrating the usual rods and blocks employed in the manufacture of the ordinary tallow dip candles. 30

Figure 3 represents my improvements as applied to the usual wooden rods and blocks, which may be altered when practicable, to meet the requirements of such improvements. The holes of the blocks (*a'*) are shewn by the dotted lines; these I suitably enlarge alternately to admit the ends of a pair of the usual rods (*a*), which may be rivetted 35 or otherwise secured together, if required, so as to form one rod or bar (*c*), upon which are arranged the lengths of wick material by hand or by a machine for such purpose, thus forming, when dipped, a series of

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pairs of candles, such as (*d*), or a double row to assist in keeping the lengths of wick material in place upon the rod or bar (*c*); one of the ordinary rods (*a*) may be employed as a weight, being placed upon the wicks as shewn, and kept in position by any suitable means. Or, I
5 form a new stock or block and bore suitable recesses, such as shewn in Figure 4, to receive the ends of the rod or bar (*c*) and also the ends of the weight rod. Or, again, having enlarged the holes in the blocks (*a'*), I use rods or bars of the section of Figure 5, and with or without the addition of a weight rod; the blocks or stocks are made to accommodate
10 the number or sets of rods or bars required, which fit into such blocks or stocks at either end, and are supported thereby, the set of rods with the suspended wicks being all dipped at one time in the ordinary manner.

Figure 6 is another form of rod, Figure 7 shewing the block (*e*)
15 suitably recessed to receive the ends of the rods; a pair of such rods may be used, if preferred, as shewn in Figure 8, the upper rod being employed as a weight upon the wicks.

Figures 9 to 20, inclusive, represent some of the many forms of bars or rods I may employ in carrying out my improvements, all having a
20 similar object, namely, that of providing a sufficient width and suspension for the wicks for the production of a double row of candles at one time and upon one rod. The blocks or stocks are in all cases suitably formed for the rods to be used therewith.

As shewn in Figures 13, 18, 19, and 20, the wooden rods may be
25 hollowed out in their length, as at (*f*), upon one or more sides to enable the ordinary rods (*a*) to be employed as the weight for keeping the wicks in position upon the rods. The form of rod, Figure 18, is shewn in section in Figure 21, as held in the block or stock, recessed as at (*g*) to receive it, an ordinary rod being used as the weight for the wicks,
30 provision being made in the block for receiving the ends of the weight rod if necessary.

Figure 22 shews a similar form of block or stock to Figure 21, with the exception that a veneer or metal plate (*h*) is secured over the recesses (*i*), instead of the material of the block being left solid at
35 such parts.

Figure 23 illustrates another form of weighted bar or rod, and the block or stock to secure the same; in this case the top part (*k*) of the block or stock is moveable from the lower part (*l*), being secured in

Ascoug's Improvements in the Manufacture of Candles.

its place upon the lower part and over the rods by any suitable fastening; or, as represented in Figures 24 and 25, I reduce the ends of the rods or bars as at (*m*), and form such ends either round or square so as to fit into the holes of the ordinary blocks (*a'*), Figures 1 and 2.

In some cases it may be found preferable to use, instead of wooden 5 rods or bars as described, metal hollow bars or rods or open tubes, such as Figure 26, Figure 27 shewing the metal hollow rod carrying wicks which are weighted if requisite by means of an ordinary rod (*a*), or other wood or metal rod, or by a bar or rod made to fit within the hollow of the metal tube as in Figure 28. Again the wicks may be held in place 10 upon the rods as shewn in Figure 29 by means of pins or rivets (*n*) passing through holes formed along the length of the rod.

Figure 30 shews in plan a method of holding the ordinary or weight bar (*a*) in position upon the wicks by means of clips or housings (*o*) secured to the rod (*p*), under which the ends of the weight rod (*a*) may 15 be slipped; other suitable fastenings may, however, be used, such as catches, turn buttons, or metal loops and bands. I also form rods either round, oblong, or other shape, in section to receive pairs of hooks or catches as shewn in Figures 31 and 32, arranged along one or both sides of the rods. Upon these hooks the lengths of wick are arranged so as 20 to produce pairs of candles in manner before described, or I employ double hooks as shewn in Figure 33 to receive the wicks, such hooks being secured into the rods by means of screws or pins; or again, I form single or double hooks with rings for slipping upon the rods, as represented in Figures 34 and 35. By another method as shewn in 25 Figure 36, I form metal turned up holders or carriers (*r*) of sufficient width, secured along one or both sides of the rods in suitable numbers, so as to support the wick in dipping candles in pairs, as before described. I can also dip candles singly by providing the rod (*y*), Figure 37, with a series of sharp pointed hooks (*y'*) along one or both sides of the 30 rod (*y*), upon which hooks the ends of the wick lengths may be stuck as shewn.

Figure 38 is an elevation, and Figure 39, a section upon the line (*x*), of Figure 38 of my improved apparatus for winding the wick material for the lengths required in the formation of pairs of candles. (*s*) is a 35 bracket or holder which may be secured to a wall or other suitable support, and which is furnished with recesses and holes, as shewn in Figure 39, to receive the ends of the rods (*t*) and (*t'*); (*v*) is a moveable

Ascough's Improvements in the Manufacture of Candles.

standard or holster for supporting the other ends of the rods (*t*) and (*t'*), being formed with recesses or holes corresponding to those in the holster (*s*). The wick material (*w*) is wound upon the rods (*t*) and (*t'*), as shewn, so as to produce any required number of doubles (*w*¹) by
5 the action of winding the wick material (*w*) upon the rods (*t*) and (*t'*), it is thereby also stretched and straightened, the moveable holster or standard (*v*) is then removed to permit one or both of the rods (*t*) and (*t'*) to be released from the holster or bracket (*s*). The wicks may either be cut through at the double parts (*w*¹), and the upper rod (*t*) with
10 the cut wicks removed for the dipping process, or the wicks upon the rods (*t*) and (*t'*) may first be partially dipped to form a candle core, and then cut at the parts (*w*¹), in which case, the lower rod (*t'*) is dipped with the wicks and forms a weight for the purpose of keeping them straight, it will be obvious without further description that the greater
15 number of the rods I have described may be used as the upper rod (*t*) of the winding apparatus shewn in Figures 38 and 39.

In witness whereof, I, the said Jesse Ascough, have hereunto set my hand and seal, this Fifteenth day of March, in the year of our Lord One thousand eight hundred and seventy.

20

JESSE ASCOUGH. (L.S.)

LONDON:

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